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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/665,105	09/20/2000	Yoshio Tozawa	32405W053	8691

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09/24/2003

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EXAMINER

BLACKMAN, ROCHELLE ANN J

ART UNIT

PAPER NUMBER

2851

DATE MAILED: 09/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/665,105

Applicant(s)

TOZAWA, YOSHIO

Examiner

Rochelle Blackman

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/30/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-4 and 17-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4 and 17-19 is/are allowed.
- 6) ☒ Claim(s) 2,3 and 20-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2/20/03. 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 2-4 and 17-31 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

1. The indicated allowability of claims 2, 3, and 20-31 are withdrawn in view of the newly discovered reference(s) to Ishii, JP Patent No. 11-301365. Rejections based on the newly cited reference(s) follow.
2. Claims 4 and 17-19 remain allowable over prior art.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2, 3, 17, 20-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Ishii, JP Patent No. 11-301365.

Regarding claims 2, 3, and 23-29, Ishii discloses a "structure for mounting cameras on a vehicle"(see Drawings 1-9), comprising: a "chassis having a predetermined length and extended in a lateral direction of a vehicle body"(see 8 of

Art Unit: 2851

Drawings 3 and 4); a "mounting seat surface formed in a center of an upper face of said chassis for mounting said chassis onto a predetermined mounting position of said vehicle body"(see 25 of Drawings 3 and 4); a "pair of stereo cameras mounted on said chassis for obtaining an image signal of a forward road environment, a camera being mounted on each end of said chassis"(see 9 and 10 of Drawing 3); a "taper plate for adjusting a vertical angle of optical axis of said stereo cameras, said taper plate being formed of a wedge-like plate and sandwiched by said mounting seat surface of said chassis and said mounting position of said vehicle body when said chassis is mounted onto said vehicle body" and "said taper plate is selected from a group consisting of the taper plates having different taper angles so that said optical axis of said stereo cameras is directed into a correct direction when said chassis is mounted onto the mounting position of the vehicle body"(see 7 of Drawing 3); "wherein said chassis has a cross section consisting of a plate-like main body extending in said lateral direction"(see 8 of Drawings 3 and 4) and a "hook-like curved portion integrally formed along a front edge of said main body"(see 26 of Drawings 3, 4 and 8); "wherein said chassis is formed by one material having a high-coefficient of thermal conductivity for performing the thermal conductivity quickly so as to keep a thermal balance between said pair of cameras" and "wherein said chassis is formed form an aluminum alloy"(see paragraphs [0006] and [0020]); "wherein said chassis is mounted onto a front rail of said vehicle body"(see 6 of Drawing 3 and paragraph [0010]); "wherein said chassis is supported by said vehicle body only through said mounting seat surface"(see 25 of Drawings 3 and 4); "wherein portions of said chassis other than said mounting seat surface are disposed

apart from said vehicle body when said chassis is mounted on said vehicle”(see Drawings 3 and 4); and “wherein said mounting seat surface has a width of about 50 mm in lateral direction”(see of Drawings 7).

Regarding claim 20-22, Ishii discloses a “structure for mounting cameras on a vehicle”(see Drawings 1-9); a “chassis having a predetermined length and extended in a lateral direction of a vehicle body”(see 8 of Drawings 3 and 4); and a “pair of stereo cameras having a camera on the right and left sides for obtaining an image signal of a forward road environment of said vehicle, each of said right side and left side cameras being mounted on each right side and left side ends, respectively, of said chassis in said lateral direction having a positional relationship to each other”(see 9 and 10 of Drawing 3); “said chassis having a mounting seat surface formed in a center of an upper face of said chassis and for mounting said chassis onto a predetermined mounting position of said vehicle body so as to mount said pair of stereo cameras on said vehicle body”(see 25 of Drawings 3 and 4); “said chassis having a “cross-section consisting of a plate like main body extending in said lateral direction”(see 8 of Drawings 3 and 4) and a “hook-like curved portion integrally formed along a front edge of said main body”(see 26 of Drawings 3 and 4); “wherein said chassis is formed by one material having a high-coefficient of thermal conductivity for performing thermal conductivity quickly so as to keep to a thermal balance between said pair of cameras” and “wherein said chassis is formed from an aluminum alloy”(see paragraph [0020]).

Regarding claim 30, Ishii discloses a “structure for mounting cameras on a vehicle”(see Drawings 1-9); a “chassis having a predetermined length and extended in a

lateral direction of a vehicle body”(see 8 of Drawings 3 and 4); a “mounting seat surface formed in a center of an upper face of said chassis for mounting said chassis onto a predetermined mounting position of said vehicle body”(see 25 of Drawings 3 and 4); a “pair of cameras mounted on said chassis for obtaining an image signal of a forward road environment, a camera being mounted on each end of said chassis”(see 9 and 10 of Drawing 3); and a “pin for positioning said chassis onto said predetermined mounting position of said vehicle body”(see Drawing 3 and paragraph [0010]).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ishii, JP Patent No. 11-301365 in view of Alexander, Jr., U.S. Patent No. 6,083,353.

Ishii discloses the claimed invention including a CCD drive circuit attached to the base side of “chassis” 8 (see paragraph [0013]).

Ishii does not appear to disclose a “circuit cover in which a circuit substrate for controlling said cameras is contained in space between said chassis and said circuit cover”.

Alexander, Jr. discloses a data bar 42 that incorporates two cameras 10 and 12 and a central processor unit that can be located within the data bar 42 (see FIG. 16 and col. 10, lines 44-57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the CCD drive circuit of the "structure for mounting cameras on a vehicle" of the Ishii reference with some type of enclosure, as taught by the Alexander reference in order to protect the CCD drive circuit from debris and/or moisture.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rochelle Blackman whose telephone number is (703) 308-2879. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russell Adams can be reached on (703) 308-2847. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

RB


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